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(71) Applicant(s)
Halliburton Energy Services, Inc.
(Incorporated in USA - Delaware)
P.O. Box 819052, Dallas, Texas 75381-9052,
United States of America

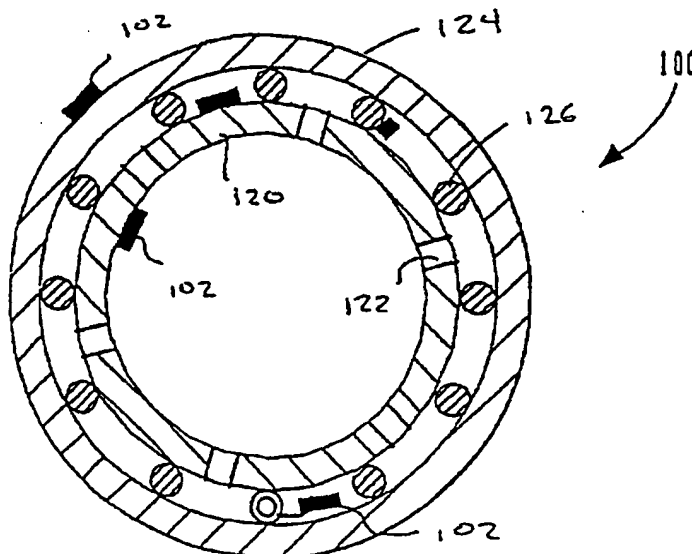
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(72) Inventor(s)
Henry L. Restarick
Clark E Robison
Roger L Schultz

(74) Agent and/or Address for Service
Forrester Ketley & Co
Forrester House, 52 Bounds Green Road,
LONDON, N11 2EY, United Kingdom

(54) Abstract Title
Sand screen with integrated sensors

(57) There is a need to better understand well conditions during gravel pack completions and during production through a gravel pack. The sensors (102) that are used to determine the conditions at the actual interface between the gravel pack and the production interval are located directly on the gravel pack assembly (100). This allows for the most accurate and timely understanding of the interface conditions. Sensors (102) along the length of the gravel pack can provide real time bottom hole pressure and temperature readings. Other sensors (102) could provide information on flow rate of fluids produced as well as density measurements. Thus, during completion, the sensors (102) can provide information on the effectiveness of gravel placement. During production, the sensors (102) could provide instantaneous information on dangerous well conditions in time to minimize damage to the well equipment.



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